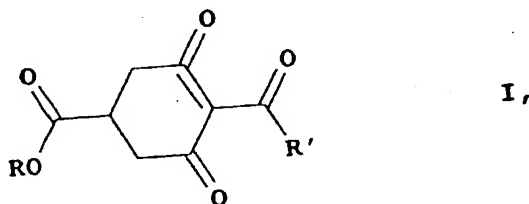


COMPLETE LISTING OF AMENDED CLAIMS

1. (currently amended) A method of increasing and qualitatively modifying the content of flavonoids and phenolic constituents in a plant selected from grapevines, cherries, plums, sloes, blueberries, strawberries, citrus fruit, pawpaw, red cabbage, broccoli, Brussels sprouts, kale, carrots, parsley, celery/celeriac, onions, garlic, tea, coffee, cacao, maté, hops, soya, oilseed rape, *Aronia melanocarpa* or *Ginko biloba*, which comprises treating the plant with an acylcyclohexanedione of the formula I

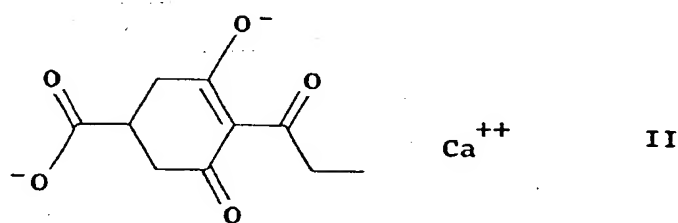


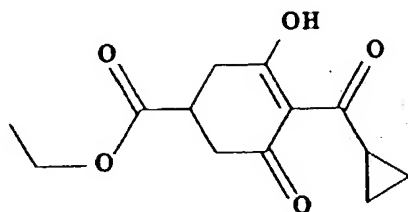
where R is hydrogen or C₁-C₆-alkyl and R' is C₁-C₆-alkyl or C₃-C₆-cycloalkyl, or with a suitable salt of I,

thereby giving the plant an increased and qualitatively modified content of flavonoids and phenolic constituents compared to an untreated plant.

2. (currently amended) A method as claimed in claim 1, wherein the ~~plants are~~ plant is treated with an acylcyclohexanedione of the formula II and/or the formula

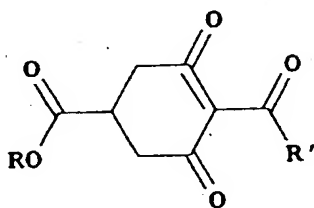
III





III.

3. (previously presented) A method as claimed in claim 1, wherein the content of flavonoids and phenolic constituents of grapevines is increased and qualitatively modified.
4. (previously presented) A method as claimed in claim 1, wherein the content of flavonoids with an unsubstituted C atom in the 3-position, and the oligomers and polymers of these flavonoids, is increased.
5. (canceled)
6. (currently amended) An extract, juice, wine or press cake with an increased and qualitatively modified content of flavonoids and other phenolic constituents, obtained from grapes of a red grapevine variety, the grapevine plant previously having been treated with at least one acylcyclohexanedione of the formula I



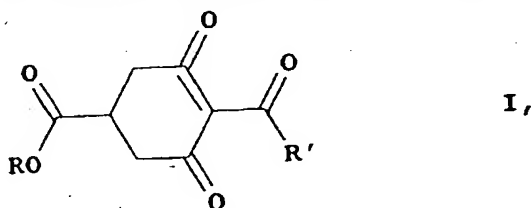
I,

where R is hydrogen or C₁-C₆-alkyl and R' is C₁-C₆-alkyl or C₃-C₆-cycloalkyl, or with a suitable salt of I.

7. (currently amended) A curative composition for treating illnesses associated with human or animal health, health promoting composition or tonic for humans or animals, or a cosmetic comprising the plant selected from grapevines, cherries,

plums, sloes, blueberries, strawberries, citrus fruit, pawpaw, red cabbage, broccoli, Brussels sprouts, kale, carrots, parsley, celery/celeriac, onions, garlic, tea, coffee, cacao, maté, hops, soya, oilseed rape, oats, wheat, rye, *Aronia melanocarpa* or *Ginko biloba* or a part of the plant or a product prepared with the plant selected from juices, teas, extracts, fermentation products or fermentation residues, wherein said plant has been treated with the acylcyclohexanedione of claim 1.

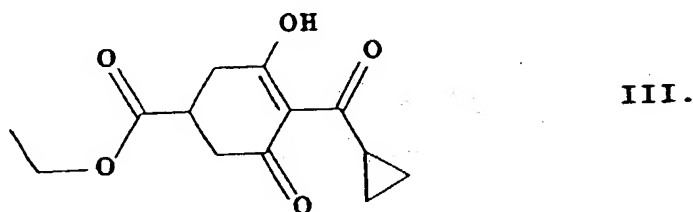
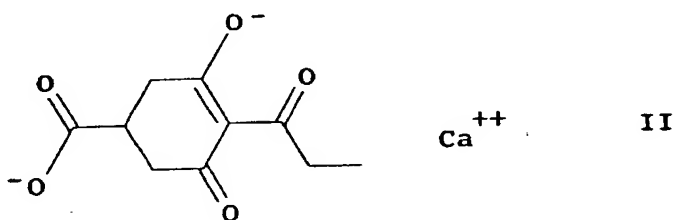
8. (previously presented) A method as claimed in claim 1, wherein the plant is an apple plant.
9. (previously presented) A method as claimed in claim 1, wherein the plant is a grapevine.
10. (new) A method for producing a plant preparation with an increased and qualitatively modified content of flavonoids and phenolic constituents, which method comprises
 - (1) treating a plant selected from from grapevines, cherries, plums, sloes, blueberries, strawberries, citrus fruit, pawpaw, red cabbage, broccoli, Brussels sprouts, kale, carrots, parsley, celery/celeriac, onions, garlic, tea, coffee, cacao, maté, hops, soy, oilseed rape, *Aronia melanocarpa* or *Ginko biloba*, with an acylcyclohexanedione of formula I



where R is hydrogen or C₁-C₆-alkyl and R' is C₁-C₆-alkyl or C₃-C₆-cycloalkyl, or with a suitable salt of I; and

- (2) harvesting and processing the plant or parts of the plant to obtain a plant preparation which has an increased and qualitatively modified content of flavonoids and phenolic constituents.

11. (new) The method as claimed in claim 10, wherein the plant is treated in step (1) with an acylcyclohexanedione of formula II and/or formula III



12. (new) The method as claimed in claim 10, where a plant preparation with an increased content of flavonoids with an unsubstituted C-atom in the 3-position, and of the oligomers and polymers of these flavonoids, is obtained.
13. (new) The method as claimed in claim 10, wherein the plant is an apple plant.
14. (new) The method as claimed in claim 10, wherein the plant is a grapevine.
15. (new) The composition or tonic as claimed in claim 7, wherein, after having been treated with the acylcyclohexanedione, the plant or parts of the plant have been harvested and processed to obtain said composition or tonic.